## **CLAIMS**

- 1 1-7. *(canceled)*
- 1 8. (previously presented) A method comprising the steps of:
- 2 introducing sample liquid into a reaction cell having a hybridization
- 3 probe array so that some interior volume is partially occupied by
- 4 sample liquid and partially occupied by gas;
- 5 centrifuging said sample liquid by rotating said reaction cell so that
- 6 centrifugal force in excess of 1G urges said sample liquid against said
- 7 array; and
- 8 agitating said sample liquid in said reaction cell during said
- 9 centrifuging so that said sample liquid moves relative to said array.
- 9. (previously presented) A method as recited in Claim 8 wherein
- 2 said agitation involves rotating said reaction cell about an agitation
- 3 axis that is more orthogonal to than along said centrifugal force.
- 1 10. (previously presented) A method as recited in Claim 9 wherein
- 2 said agitating involves periodically changing the direction of rotation
- about said agitation axis so as to define an agitation cycle rate.
- 1 11. (currently amended) A method as recited in Claim 10 wherein
- 2 said centrifuging involves rotating said reaction cell during said
- 3 <u>agitating</u> at a centrifuge rate greater than said agitation rate.
- 1 12. (currently amended) A method as recited in Claim 10-8 wherein
- 2 said agitation involves rotating said reaction cell about an agitation
- 3 axis that extends more parallel to than orthogonal to said centrifuge
- 4 axis.
- 1 13. (previously presented) A method as recited in Claim 12 wherein
- 2 said array extends more orthogonal to said centrifugal force than along
- 3 it so that said centrifugal forces urges said sample liquid against said
- 4 array.

- 1 14. (currently amended) A method as recited in Claim 13 further
- 2 comprising a step of removing sample liquid from said reaction cell,
- 3 said removing step involving rotating said reaction cell by rotating it
- 4 about said agitation axis so that said centrifugal force urges said fluid
- 5 in said reaction cell away from said array.
- 1 15. (currently amended) A method as recited in Claim 8 wherein
- 2 said sample liquid occupies at most half of said interior volume during
- 3 said centrifuging and agitating.
- 1 16. (previously presented) A method comprising:
- 2 introducing sample liquid into a reaction cell having a hybridization
- 3 probe array so that some interior volume is partially occupied by
- 4 sample liquid and partially occupied by gas;
- 5 centrifuging said sample liquid by rotating said reaction cell so that
- 6 centrifugal force urges said sample liquid against said array; and
- 7 rotating said reaction cell about an agitation axis that is more
- 8 orthogonal to than along said centrifugal force so that said sample
- 9 liquid moves relative to said array.
- 1 17. (previously presented) A method as recited in Claim 16 wherein
- 2 said agitating involves periodically changing the direction of rotation
- 3 about said agitation axis so as to define an agitation cycle rate.
- 1 18. (currently amended) A method as recited in Claim 17 wherein
- 2 said centrifuging involves rotating said reaction cell during said
- 3 <u>agitating</u> at a centrifuge rate greater than said agitation rate.
- 1 19. (currently amended) A method as recited in Claim 18 wherein
- 2 said sample liquid occupies at most half of said interior volume during
- 3 said agitating.

- 1 20. (previously presented) A method comprising:
- 2 introducing sample liquid into a reaction cell having a hybridization
- 3 probe array so that some interior volume is partially occupied by
- 4 sample liquid and partially occupied by gas;
- 5 centrifuging said sample liquid by rotating said reaction cell so that
- 6 centrifugal force urges said sample liquid against said array; and
- 7 rotating said reaction cell about an agitation axis that is more
- 8 parallel than orthogonal to said centrifugal force so that said sample
- 9 liquid moves relative to said array.
- 1 21. (previously presented) A method as recited in Claim 20 wherein
- 2 said agitating involves periodically changing the direction of rotation
- about said agitation axis so as to define an agitation cycle rate.
- 1 22. (currently amended) A method as recited in Claim 21 wherein
- 2 said centrifuging involves rotating said reaction cell during said
- 3 <u>agitating</u> at a centrifuge rate greater than said agitation rate.
- 1 23. *(previously presented)* A method as recited in Claim 20 wherein
- 2 said array extends more orthogonal to said centrifugal force than along
- 3 it so that said centrifugal force urges said sample liquid against said
- 4 array.
- 1 24. (previously presented) A method as recited in Claim 23 further
- 2 comprising removing sample liquid from said reaction cell, said
- 3 removing involving rotating said reaction cell by rotating it about said
- 4 agitation axis so that said centrifugal force urges said fluid in said
- 5 reaction cell away from said array.
- 1 25. (currently amended) A method as recited in Claim 20 wherein
- 2 said sample liquid occupies at most half of said interior volume during
- 3 said agitating.